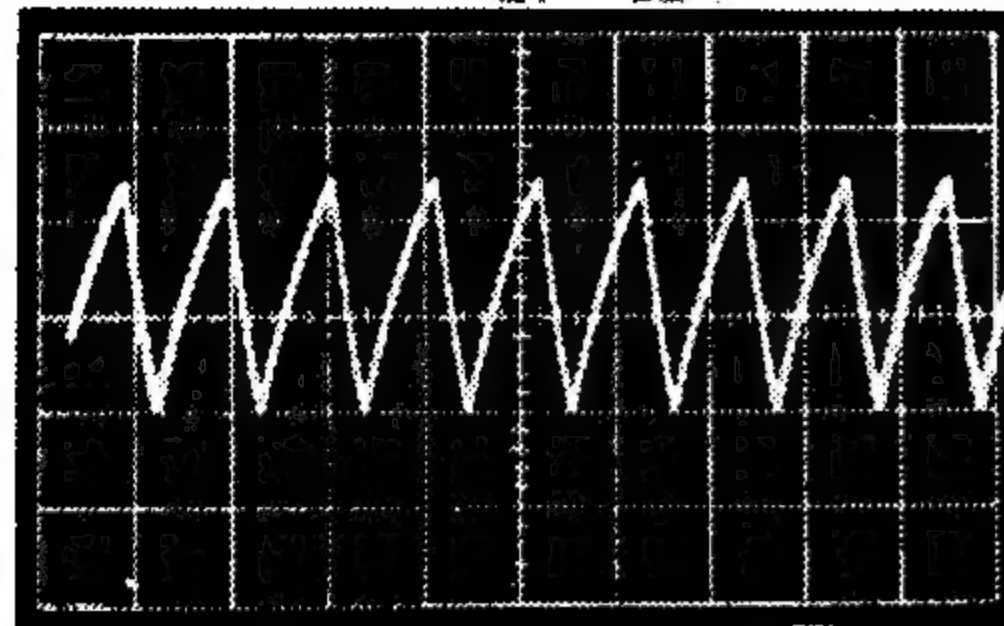


# WAVEFORMS

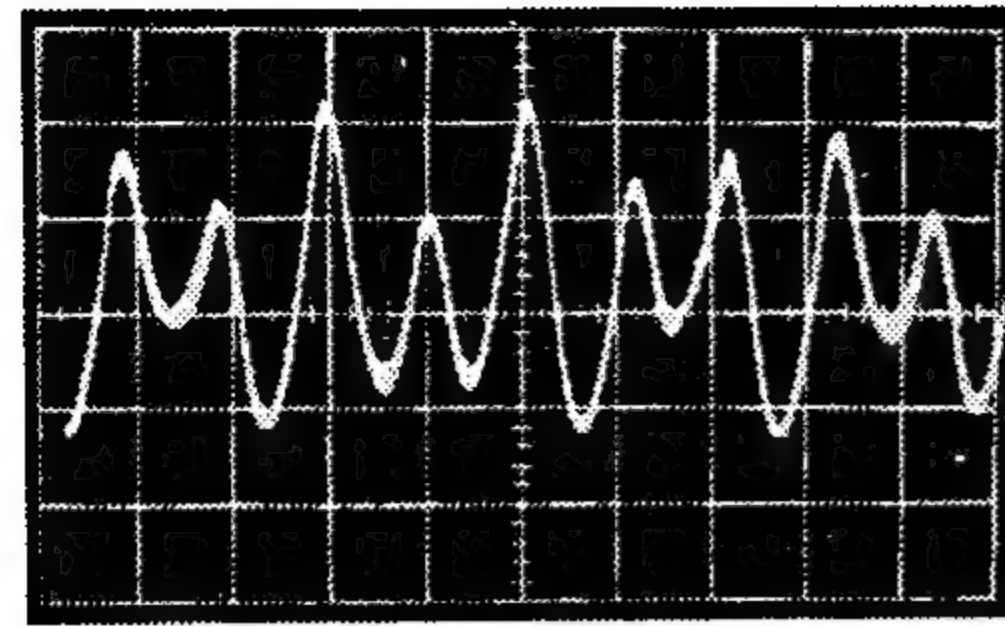
#1

#2

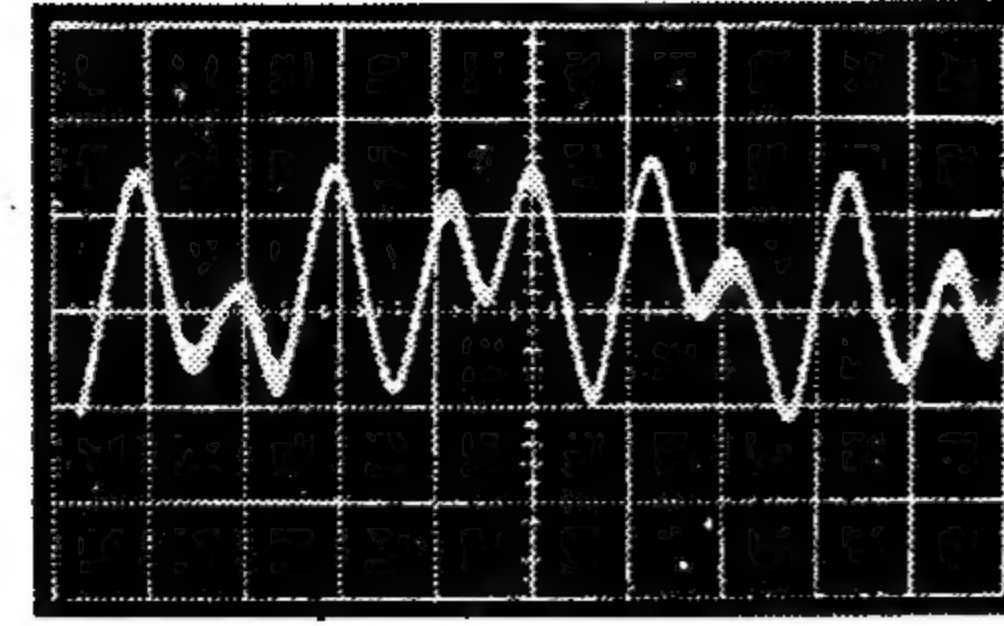
#3



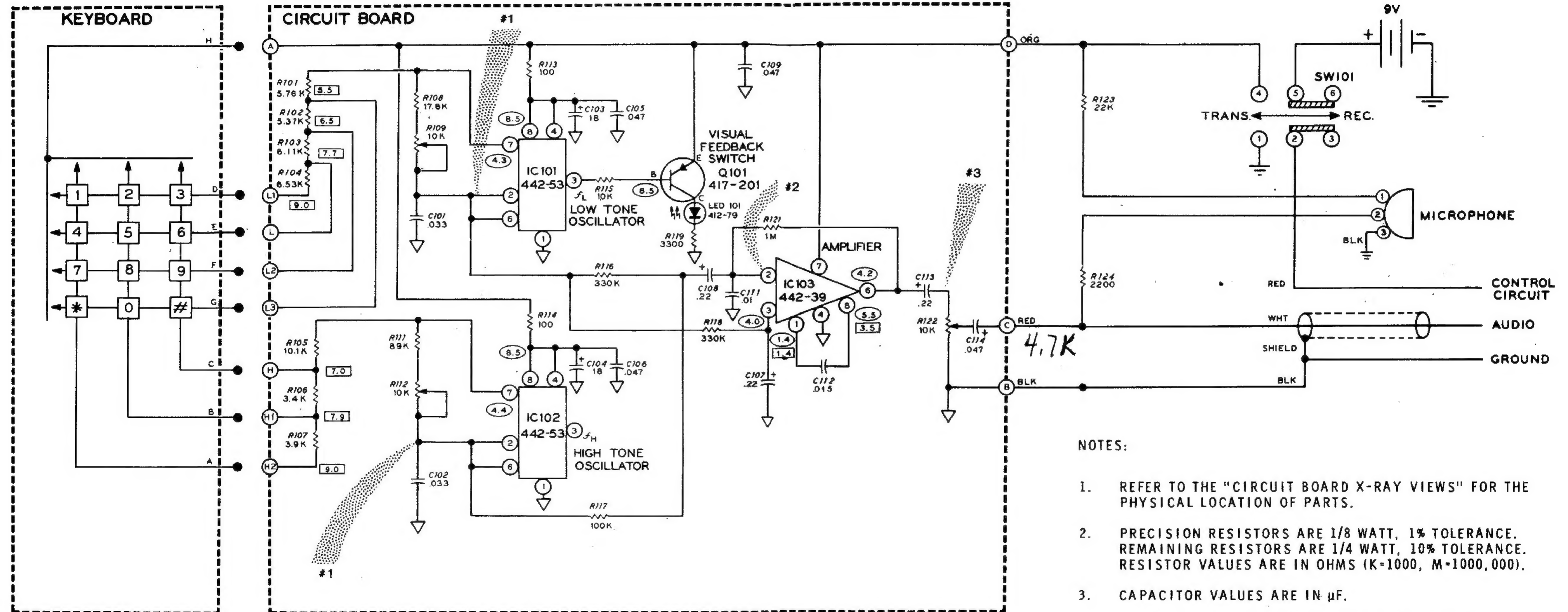
2.5 V P-P



.35 V P-P



.25 V P-P



## NOTES:

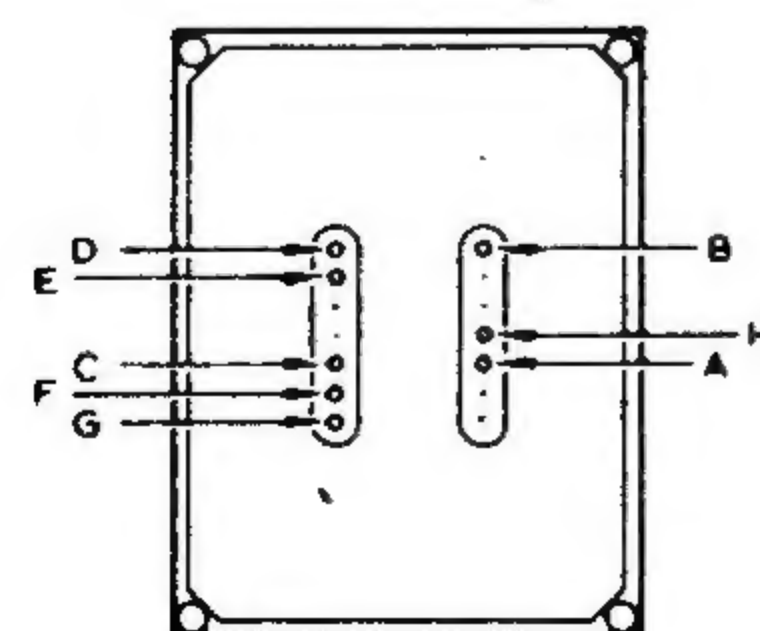
1. REFER TO THE "CIRCUIT BOARD X-RAY VIEWS" FOR THE PHYSICAL LOCATION OF PARTS.
2. PRECISION RESISTORS ARE 1/8 WATT, 1% TOLERANCE. REMAINING RESISTORS ARE 1/4 WATT, 10% TOLERANCE. RESISTOR VALUES ARE IN OHMS (K=1000, M=1000,000).
3. CAPACITOR VALUES ARE IN  $\mu$ F.
4. DC VOLTAGE MEASUREMENTS WERE TAKEN WITH A HIGH INPUT IMPEDANCE VOLTMETER FROM THE POINT INDICATED TO CIRCUIT BOARD GROUND. VOLTAGES MAY VARY  $\pm 10\%$ .
5. THIS SYMBOL INDICATES A DC VOLTAGE WITH NO TONE BEING PRODUCED, BUT PTT SWITCH SW101 DEPRESSED.
6. THIS SYMBOL INDICATES A DC VOLTAGE WITH KEY "1" PUSHED AND PTT SWITCH SW101 DEPRESSED.
7. THIS SYMBOL INDICATES CIRCUIT BOARD GROUND.
8. THIS SYMBOL INDICATES A CONNECTION TO THE CIRCUIT BOARD.
9. THE WAVEFORMS SHOWN WERE OBTAINED BY PUSHING KEY "1" WITH PTT SWITCH SW101 DEPRESSED.

## SCHEMATIC OF THE HEATHKIT® MICODER™ MODEL HD-1982

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	A	B	C	D	E	F	G	H
1	●	●	●	●	●	●	●	●
2	●	●	●	●	●	●	●	●
3	●	●	●	●	●	●	●	●
4	●	●	●	●	●	●	●	●
5	●	●	●	●	●	●	●	●
6	●	●	●	●	●	●	●	●
7	●	●	●	●	●	●	●	●
8	●	●	●	●	●	●	●	●
9	●	●	●	●	●	●	●	●
0	●	●	●	●	●	●	●	●
*	●	●	●	●	●	●	●	●
#	●	●	●	●	●	●	●	●

INDICATES TERMINAL SHORTED TO COMMON WHEN KEY IS DEPRESSED  
TERMINAL H IS COMMON



IDENTIFICATION  
OF KEYBOARD PINS

Low Tone (Hz)	High Tone (Hz)		
	1209	1336	1477
697	1	2	3
770	4	5	6
852	7	8	9
941	.	0	#

TWO-TONE OUTPUT FREQUENCIES FROM THE MICODER™